

*Rebate in Labor HEW
Appr. Bill 3/21/55*

I wish that every member of Congress could have heard the testimony on medical research which was presented before our Appropriations Subcommittee in February and released in a public document March 16. The occasion was a review of the 1956 budget proposals for the National Institutes of Health. As the hearings progressed, I was filled with pride at the record of accomplishment which was brought before us. Today, I want to share some of my feeling with you.

The people of Rhode Island's 2nd District have asked me to represent them in Congress for the last fourteen years. During most of this time, I have chosen to serve on the subcommittee concerned with funds for labor, health, education, and welfare activities of the Federal Government. This is no mere accident of seniority and succession. I feel that many matters of the most vital and personal significance to the American people are brought before this committee. It has been a privilege for me to observe and participate in the evolution of the various programs in the Department of Labor and the Department of Health, Education, and Welfare.

One of these programs in which I have had a continuing interest is that of the National Institutes of Health, located in Bethesda, Maryland. As part of the Public Health Service, it has a long and distinguished record of service. Its research activities began in the 1880's. From the turn of the century until the present time, its scientists have made great contributions to the control and eradication of such diseases as diphtheria, smallpox, plague, cholera, typhoid, typhus, pellagra, and the other diseases which were a constant menace

a few short years ago, but are rarely heard of today.

Just before, during, and immediately after World War II, it became abundantly clear that medical research in this country had to face up to a whole new set of problems. If these problems were to be met, our medical research efforts would have to be reorganized, re-directed, and strengthened by more adequate support from all sources, both private and public.

The population of the United States was growing rapidly. At the same time, the average life span was increasing. A child born in 1950 could look forward to almost 70 years of life, in contrast to the child born in 1900, whose life expectancy was less than 50 years. These population changes had the net effect of causing more people to live to middle and old age. It was this fact, resulting from the increasing control of the communicable diseases, that caused a need for a shift in medical research emphasis. It had become important to focus primarily on the diseases which cause premature death and long-term disability--diseases such as heart disease, cancer, mental illness, arthritis, and so on. This meant fundamental changes in the method and content of medical research itself, for these were challenging, complex diseases about which little was known.

There was another important factor at work during this period of transition. The United States had been dependent largely upon European research for much basic scientific data. We were cut off from that source of supply by 1940--and it has never been resumed. Yet research against chronic illness could not hope for success unless there was a

continuing flow of basic data to provide the essential underpinning for progress. Thus, one of the challenges of the times was to establish and sustain a diversified and productive national research effort in the basic sciences, and at the same time provide assurance that each promising lead from the basic science laboratories would be quickly exploited if it promised to yield something of value in the prevention and control of disease.

Still another factor helped reshape our medical research structure at this time. Our victory in World War II was in part a demonstration of a great national capacity for productive research. All sorts of problems yielded to concentrated research effort under the impetus of the struggle for the survival of freedom--problems ranging from the mysteries of the atom to improved psychiatric treatment for war-borne psychoses. In fact our success in the Far East was made possible largely by our conquest of malaria and the dysenteries. When the war was over, it seemed imperative that the research effort should continue, and the American people confidently expected that a part of that effort would be centered on the problems of health and disease.

The interplay among these and other forces resulted in policy decisions that materially affected the National Institutes of Health. One was that it was appropriate for the Federal Government to continue to support medical research and research training through grants and awards. The National Institutes of Health took over a group of grants from the abolished Office of Scientific Research and Development, and we saw the beginning of a research grants program which has grown and prospered through the years, until now it supports more than one-quarter of all medical research

conducted in the Nation's medical schools and universities.

Another policy decision was that the National Institutes of Health should gradually strengthen and redirect its own research activities at Bethesda, in order to be a fully effective complement to the private medical research effort. The years have seen the establishment of new Institutes--the National Heart Institute in 1948, the National Institute of Mental Health in 1949, the National Institute of Neurological Diseases and Blindness in 1950--until today, the seven Institutes cover the full range of diseases which plague mankind.

A third policy decision was that the National Institutes of Health required extensive clinical research facilities to round out its research program. The beautiful new Clinical Center was authorized in 1947, started in 1949, and has just been completed. This center, with its functional design, has beds for 500 study patients and 1000 rooms for clinical and laboratory investigation, providing the National Institutes of Health with medical research resources that are second to none in the world.

It was apparent then, as it is today, that research progress is dependent upon a continuing supply of trained scientific manpower, modern research facilities in which to work, and adequate funds for the support of research projects. All of these requirements have been met in part by a responsive Congress--the first by expended fellowship, training grant, and teaching grant programs; the second by a program of research construction grants for heart and cancer facilities (terminated, unfortunately, by the Korean War), as well as by the new facilities on the grounds of

the National Institutes of Health; and the third need, support of research projects, has been increased each year since the program expansion began in 1946.

I have watched the growth of the National Institutes of Health very closely during this period of transition. In the decade since the war, it has changed almost beyond recognition.....in size, and in outward appearance. But the fundamental motivation remains the same--the organized, thoughtful search by well-trained and dedicated men for new knowledge which will be useful in the conquest of disease.

The National Institutes of Health, as a public institution, could not have reached its present state of development if it had not been for the strong bipartisan support of Congress. It represents a capital investment of more than \$80 million. Its annual appropriation for the current fiscal year is \$81 million--of which more than \$50 million is allocated to research grants, research training, and related programs for the support of research in medical schools, universities, and other private research institutions. An investment of this magnitude is an act of great faith by the Congress both in the ultimate return from investment in medical research and in the effectiveness and productivity of the National Institutes of Health itself.

As chairman of the subcommittee directly concerned with these appropriations, I am pleased to be able to report to you that there is ample evidence that our faith and confidence has been well founded.

I can recall clearly the hearings on some of these appropriations during the years immediately after the war. Productive research was continuing in the NIH laboratories. But most of the testimony centered

around the nature of the research problems, their size and importance (in both human and economic terms), and the steps that would have to be taken in order to launch a major research attack. This was a necessary note to strike during a period of transition.

Last year, and even more dramatically this year, however, there was a new note in the hearings: a note of solid progress, demonstrating specific advances and leaving us with the conviction that the National Institutes of Health has come through its period of transition with flying colors and is now come of age.

It is of course difficult to attempt any specific correlation between medical research progress and dollars saved in the national economy, although we know such correlation exists. Isolated facts point up the way it works. Mental illness costs the Nation more than a billion tax dollars a year for institutional care alone. Half of the mentally ill who are hospitalized suffer from schizophrenia. Improvements in the prevention or treatment of schizophrenia, then, would obviously have great meaning to the American taxpayer.

Or consider the more than $4\frac{1}{2}$ million Americans with high blood pressure, a disease which causes a progressively increasing amount of disability after middle age. If there were a way to control this disease, it would return rich dividends.

Even the common cold, that much-ridiculed "minor" disease which afflicts the average person several times a year, is estimated to cost the Nation several billion dollars a year in absenteeism and lost productivity.

Facts such as these indicate that the stakes are high in economic

terms. Even more important are the stakes in terms of human happiness and well-being. A fundamental principle under our system of government is that the individual citizen has a right to "life....and the pursuit of happiness." The government has an obligation to help the individual achieve these goals, in part by making it possible for him to achieve better health.

Tangible evidence that our Government is meeting this obligation is found in some of the current reports of progress in research conducted or supported by the National Institutes of Health. I would like to cite several examples. My purpose in doing so is to convey to you the sense of movement which we felt so strongly in our committee hearings and which is reflected in the committee report on these appropriations.

One report from the National Cancer Institute is that there is now available a diagnostic technique which, if applied broadly in medical and public health practice, can virtually conquer cancer of the cervix in women. This is the second most common form of cancer from which women suffer.

We were informed of the results of a group of grantees supported by the Neurology Institute. They undertook to establish the cause of a form of blindness called retrolental fibroplasia, which is common among premature infants. They found that administration of too much oxygen during the first days of life was responsible. With this knowledge, it is possible to prevent this disease, which has already claimed more than 8000 victims doomed to total blindness from birth.

Another form of blindness, called uveitis, has caused nearly 30,000

people in this country to be totally blind and another 150,000 blind in one eye or visually handicapped. In NIH laboratories, it was established that one form of this disease was caused by an organism called toxoplasma, and that the disease responded to treatment with a combination of medicinals, one of which was developed at NIH.

The Arthritis Institute has recently announced work with a pair of new drugs which promise to be four times as effective as cortisone in the treatment of rheumatoid arthritis.

The Heart Institute reports new drugs which are highly effective in lowering blood pressure, and the Cancer Institute reports drugs which, while they are not cures, can add one to five years to the lives of children afflicted with leukemia.

The Microbiological Institute reports very hopeful progress toward finding effective vaccines against the common cold and other minor upper respiratory infections. The hope stems from the successful isolation of a whole series of hitherto unknown viruses, called the APC viruses, which are associated with the development of striking epidemic illness.

Research on epilepsy by the Neurology Institute offers some very promising leads having to do with chemical deficiencies of the epileptic tissue which may possibly be corrected by adding chemicals to the blood.

The Microbiological Institute has made significant progress in developing and testing effective vaccines against influenza.

The Cancer Institute has demonstrated the usefulness of the female sex hormones in treatment for cancer of the breast, cervix, and the prostate gland.

Items of progress such as these and many others recorded in the hearings are I think the kind of return Congress was hoping for when it supported the development of the National Institutes of Health during the decade just past.

It would be short-sighted indeed to base one's judgment solely on reports to and testimony before a committee of Congress.

The committee has also received a great deal of clarifying testimony and wise counsel from distinguished scientists and interested laymen who have journeyed to Washington at their own expense to comment on the health needs of the Nation.

In addition, members of the committee have visited the National Institutes of Health to see firsthand the work that is going on in the laboratories, the research facilities, and the caliber of the professional staff.

Through the years, we have been impressed, too, by the demonstrated ability of the National Institutes of Health to administer a complex and extensive program in support of research and research training--a program which reaches into the heart of virtually every medical research institution in this country--without interference, without Federal domination or control, but with the kind of relations which assure that the program meets the needs of the Nation as a whole. I have met personally with a number of medical school deans, administrators, teachers, and research workers; and I am assured that the mechanisms for administration and review of these grant and award programs, and the policies which they reflect, are broadly endorsed throughout the country.

Gentlemen, the total medical research expenditure in this Nation today is under \$200 million a year. This includes support of research from all sources - philanthropy, endowment, industry, and government. It represents only 5% of all research and development of all kinds. I do not propose to make comparisons between medical research and other necessary research, such as that in atomic energy, or in agriculture. I do believe, however, that the \$200 million total is small in view of the importance of the problems of disease and the potential gain from attacking disease through medical research.

The annual appropriations to the National Institutes of Health represent an important segment of the total national expenditure for such research. We have in large measure helped to create a program which is essential to continuing progress against disease. It is today an alert, flexible, dynamic program. It is up to us, and to those who may succeed us, to make sure that the program measures up through periodic review. I propose, as a part of my duties, to continue to conduct such reviews, paying particular attention to the broad areas of research interest and seeking to pinpoint research needs wherever they may occur. At the same time, I propose to make sure that the National Institutes of Health does not suffer through thoughtless and short-sighted decisions which might put its productivity in jeopardy.